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EXAMINER
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NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
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2616

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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/627,253	MASON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Toan D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10,22-34,42-50,61-66,69-72,75 and 76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10,22-34,42-50,61-66,69-72,75 and 76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/19/07</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 4-6, 22-23, 25, 27-33, 42-43, 45-47, 61-65, 69, 71, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 6,470,179) in view of Joensuu (US 6,181,937).

For claim 1, Chow et al. disclose automatic service selection feature for neighborhood residential cordless service, comprising:

(a) receiving a signaling system seven (SS7) message in response to a telephony related action performed by a target end user to which other end users are

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subscribed in a presence database (figure 5a, reference step a, col. 17 lines 58-64);  
and

(d) transmitting the presence registration message to the presence server  
over an IP network (figure 5a, reference step a, col. 18 lines 9-19)

However, Chow et al. do not expressly disclose:

(b) determining, based on the SS7 message, whether presence registration  
processing is required for the target end user.

(c) in response to determining that presence registration processing is  
required for the target end user, automatically generating a presence registration  
message including presence information usable by a presence server for automatically  
indicating to the end users in a presence database a presence status for the target end  
user.

In an analogous art, Joensuu discloses:

(b) determining, based on the SS7 message, whether presence registration  
processing is required for the target end user (col. 2 lines 24-27).

(c) in response to determining that presence registration processing is  
required for the target end user, automatically generating a presence registration  
message including presence information usable by a presence server for automatically  
indicating to the end users in a presence database a presence status for the target end  
user (col. 2 lines 31-39).

One skilled in the art would have recognized the determining, based on the SS7  
message, whether presence registration processing is required for the target end user,

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and would have applied Joensuu's VMSC 108 in Chow et al.'s MSC 178. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Joensuu's method for avoiding unnecessary signaling in a cellular communication system in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to provide a location updating procedure with the HLR (col. 2 lines 29-30).

For claim 2, Chow et al. disclose a PSTN telephone to initiate a call from the target end user to the called party telephone number and the signaling system seven message is an IAM message (figure 5a, col. 17 lines 58-61).

For claim 4, Chow et al. disclose wherein the SS7 message is a transaction capabilities application part (TCAP) message containing presence information for the target end user (col. 18 line 14).

For claim 5, Chow et al. disclose automatic service selection feature for neighborhood residential cordless service, comprising:

(a) receiving a signaling system seven 7 (SS7) message in response to a telephony related action performed by a target end user (figure 5a, reference step a, col. 17 lines 58-64); and

(b) intercepting the SS7 message, extracting information from the SS7 message (col. 17 lines 59-61).

However, Chow et al. do not expressly disclose:

wherein the telephony-related action is the activation or change in location of a mobile telephone handset and the SS7 message is a message for updating the status

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of the target end user in at least one of a home location register (HLR) and a visitor location register (VLR);and

using the information extracted from the SS7 message to update presence protocol information for the target end user in a presence database, the presence information including information usable by a presence server for automatically indicating to end users who are subscribed to the target end user a presence status for the target end user.

In an analogous art, Joensuu discloses:

wherein the telephony-related action is the activation or change in location of a mobile telephone handset and the SS7 message is a message for updating the status of the target end user in at least one of a home location register (HLR) and a visitor location register (VLR)(col. 2 lines 31-39); and

using the information extracted from the SS7 message to update presence protocol information for the target end user in a presence database, the presence information including information usable by a presence server for automatically indicating to end users who are subscribed to the target end user a presence status for the target end user (col. 2 lines 31-39).

One skilled in the art would have recognized the wherein the telephony-related action is the activation or change in location of a mobile telephone handset and the SS7 message is a message for updating the status of the target end user in at least one of a home location register (HLR) and a visitor location register (VLR), and would have applied Joensuu's VMS 108 in Chow et al.'s MSC 178. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention, to use Joensuu's method for avoiding unnecessary signaling in a cellular communication system in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to provide a location updating procedure with the HLR (col. 2 lines 29-30).

For claim 6, Chow et al. disclose wherein automatically generating a presence registration message includes automatically generating a presence protocol message (col. 18 lines 11-16).

For claims 22, 30 and 31, Chow et al. disclose automatic service selection feature for neighborhood residential cordless service, comprising:

(a) a communication module for receiving an SS7 message relating to a target end user to which other end users are subscribed in a presence database (figure 5a, reference step a, col. 17 lines 58-64); and

(b) a presence server message generator for, if the communication module determines that presence registration processing is required, for receiving a copy of the SS7 message and for automatically generating a presence registration message including presence information usable by a presence server for automatically indicating to the end users subscribed to the target end user a presence status for the target end user, wherein the presence server message generator is adapted to forward the presence registration message to the presence database (col. 18 lines 11-16).

However, Chow et al. do not expressly disclose determining whether presence registration processing is required for the SS7 message. In an analogous art, Joensuu

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discloses determining whether presence registration processing is required for the SS7 message (col. 2 lines 31-39).

Joensuu discloses a presence server database operatively associated with the presence server message generator for receiving the presence-server-compatible message and for updating the presence information in response to the presence-server-compatible message (col. 2 lines 31-40 as set forth in claim 30), wherein the presence server database is located internal to the presence registration and routing node (col. 2 lines 31-40 as set forth in claim 31).

One skilled in the art would have recognized the determining whether presence registration processing is required for the SS7 message, and would have applied Joensuu's VMSC 108 in Chow et al.'s MSC 178. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Joensuu's method for avoiding unnecessary signaling in a cellular communication system in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to provide a location updating procedure with the HLR (col. 2 lines 29-30).

For claim 23, Chow et al. disclose an advanced database communication module for encapsulating the presence registration message in an IP packet and transmitting the IP packet to a presence server over an IP network (col. 18 lines 17-19).

For claim 25, Chow et al. disclose wherein the presence registration message is a presence protocol message (col. 18 lines 11-16).



For claim 27, Chow et al. disclose wherein the SS7 message is an ISDN user part (ISUP) message (col. 17 line 60).

For claim 28, Chow et al. disclose wherein the SS7 message is a transaction capabilities application part (TCAP) message (col. 18 line 14).

For claim 29, Chow et al. disclose automatic service selection feature for neighborhood residential cordless service, comprising:

(a) a communication module for receiving an SS7 message from an SS7 network (figure 5a, reference step a, col. 17 lines 58-64).

However, Chow et al. do not expressly disclose:

(b) a presence server message for generating, based on the SS7 message, a presence-server-comparable message for updating presence information regarding the target end user, in a presence server database, the presence information including a presence status for the target end user, wherein the presence server message generator is adapted to forward the presence-server-compatible message to the presence server database.

In an analogous art, Joensuu discloses:

(b) a presence server message for generating, based on the SS7 message, a presence-server-comparable message for updating presence information regarding the target end user, in a presence server database, the presence information including a presence status for the target end user, wherein the presence server message generator is adapted to forward the presence-server-compatible message to the presence server database (col. 2 lines 31-39).

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One skilled in the art would have recognized the presence server message for generating, based on the SS7 message, a presence-server-comparable message for updating presence information regarding the target end user, in a presence server database, the presence information including a presence status for the target end user, wherein the presence server message generator is adapted to forward the presence-server-compatible message to the presence server database, and would have applied Joensuu's VMS 108 in Chow et al.'s MSC 178. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Joensuu's method for avoiding unnecessary signaling in a cellular communication system in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to provide a location updating procedure with the HLR (col. 2 lines 29-30).

For claim 32, Chow et al. disclose wherein the presence server database is located external to the presence registration and routing node (col. 18 lines 11-12).

For claim 33, Chow et al. disclose wherein the presence server message generator is adapted to receive presence queries, forward the presence queries to a presence server database, and receive responses from the presence server database (col. 18 lines 9-12).

For claims 42 and 46, Chow et al. disclose automatic service selection feature for neighborhood residential cordless service, comprising:

(a) receiving a signaling system seven (SS7) message in response to a telephony related action performed by a target end user (figure 5a, reference step a, col. 17 lines 58-64); and

(c) transmitting the IP message to the presence over an IP network (figure 5a, reference step a, col. 18 lines 9-19).

However, Chow et al. do not expressly disclose:

(b) in response to receiving the SS7 message, formulating an internet protocol (IP) message for updating presence information regarding the target end user managed by a presence server, the presence information including information usable by the presence server for automatically indicating to end users subscribed to the target end user in a presence server database a presence status for the target end user.

However, Chow et al. do not expressly disclose:

(b) in response to receiving the SS7 message, formulating an internet protocol (IP) message for updating presence information regarding the target end user managed by a presence server, the presence information including information usable by the presence server for automatically indicating to end users subscribed to the target end user in a presence server database a presence status for the target end user.

In an analogous art, Joensuu discloses:

(b) in response to receiving the SS7 message, formulating an internet protocol (IP) message for updating presence information regarding the target end user managed by a presence server, the presence information including information usable by the presence server for automatically indicating to end users subscribed to the target

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end user in a presence server database a presence status for the target end user (col. 2 lines 31-39).

Joensuu discloses wherein the telephony-related action is the activation of a mobile telephone handset and the SS7 message is a message for updating the status of the target end user in at least one of a home location register (HLR) and a visitor location register (VLR)(col. 2 lines 31-39 as set forth in claim 46).

One skilled in the art would have recognized the (b) in response to receiving the SS7 message, formulating an internet protocol (IP) message for updating presence information regarding the target end user managed by a presence server, the presence information including information usable by the presence server for automatically indicating to end users subscribed to the target end user in a presence server database a presence status for the target end user, and would have applied Joensuu's VMSC 108 in Chow et al.'s MSC 178. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Joensuu's method for avoiding unnecessary signaling in a cellular communication system in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to provide a location updating procedure with the HLR (col. 2 lines 29-30).

For claim 43, Chow et al. disclose wherein the telephony-related action includes dialing a called party telephone number utilizing a PSTN telephone to initiate a call from the target end user to the called party telephone number and the signaling system seven message is an IAM message (figure 5a, step a, col. 58-61).

For claim 45, Chow et al. disclose wherein the SS7 message is a transaction capabilities application part (TCAP) message containing presence information for the target end user (col. 18 line 14).

For claim 47, Chow et al. disclose wherein formulating an IP message includes formulating a presence protocol message (col. 18 line 17).

For claim 61, Chow et al. disclose routing the SS7 message to its intended destination (col. 18 lines 11-19).

For claim 62, Chow et al. disclose wherein the communication module is adapted to route the SS7 message to its intended destination (col. 8 lines 11-19).

For claim 63, Chow et al. disclose wherein the telephony related action comprises activation of the end user's mobile telephone and wherein the presence information indicates that the target end user is currently reachable to receive messaging protocol communications via the target end user's mobile telephone (col. 18 lines 9-19).

For claim 64, Chow et al. disclose wherein the telephony related action comprises entering a predetermined code via the target end user's wireline telephone and wherein the presence information indicates that the target end user is currently reachable via the end user's wireline telephone (col. 17 lines 58-66).

For claim 65, Chow et al. disclose wherein steps (a)-(e) are performed at an SS7 signal transfer point capable of transferring SS7 Signaling messages between SS7 signaling links (col. 18 lines 9-14).

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For claim 69, Chow et al. disclose wherein the communication module includes SS7 signal transfer functionality for transferring SS7 signaling messages between SS7 signaling links (col. 18 lines 9-14).

For claim 71, Chow et al. disclose wherein steps (a)-(e) are performed at an SS7 signal transfer point capable of transferring SS7 Signaling messages between SS7 signaling links (col. 18 lines 9-14).

For claim 75, Chow et al. disclose wherein steps (a)-(e) are performed at an SS7 signal transfer point capable of transferring SS7 Signaling messages between SS7 signaling links (col. 18 lines 9-14).

4. Claims 3, 7-10, 24, 26, 34, 44, 48-50, 66, 70, 72, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow et al. (US 6,470,179) in view of Joensuu (US 6,181,937) further in view of Lamb et al. (US 6,747,970).

For claims 3, 7-9, 24, 26, 34, 44, 48-50, 66, 70, 72, and 76, Chow et al. in view of Joensuu do not expressly disclose wherein the telephony-related action includes entering DTMF digits using a PSTN telephone handset after a call has been established, the DTMF digits forming a code for instructing an end office to formulate the SS7 message. In an analogous art, Lamb et al. disclose wherein the telephony-related action includes entering DTMF digits using a PSTN telephone handset after a call has been established, the DTMF digits forming a code for instructing an end office to formulate the SS7 message (col. 9 lines 6-7).

Lamb et al. disclose wherein automatically generating a presence registration message includes automatically generating a session initiation protocol (SIP) message

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(col. 43 line 2 as set forth in claim 7), wherein automatically generating a presence registration message includes automatically generating an instant messaging and presence protocol (IMPP) message (col. 45 line 10-11 as set forth in claim 8), in response to receiving the SS7 message, sending a second message to an accounting and billing system (col. 14 lines 52-61 as set forth in claim 9), wherein the presence registration message is a session initiation protocol (SIP) message (col. 43 line 2 as set forth in claim 24), wherein the presence registration message is an instant messaging and presence protocol (IMPP) message (col. 45 line 10-11 as set forth in claim 26), (a) means for generating an accounting message based on at least one of the SS7 message received by the communication module and the presence- server-compatible message; and (b) an accounting and billing system for storing accounting information based on the accounting message (col. 14 lines 52-61 as set forth in claim 34), wherein the telephony-related action includes entering DTMF digits using a PSTN telephone handset after a call has been established, the DTMF digits forming a code for instructing an end office to formulate the SS7 message (col. 9 lines 6-7 as set forth in claim 44), wherein formulating an IP message includes formulating a session initiation protocol (SIP) message (col. 43 line 2 as set forth in claim 48), wherein formulating an IP message includes formulating an instant messaging and presence protocol (IMPP) message (col. 45 line 10-11 as set forth in claim 49), generating an accounting message in response to at least one of the SS7 message and the IP message and forwarding the accounting message to an accounting and billing subsystem (col. 14 lines 52-61 as set forth in claim 50), wherein the presence information includes information usable by the

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users subscribed to the target end user for contacting the target end user via an instant messaging protocol (col. 45 line 10-11 as set forth in claim 66), wherein the message protocol comprises an instant messaging protocol (col. 45 line 10-11 as set forth in claim 70), wherein the presence information includes information usable by the users subscribed to the target end user for contacting the target end user via an instant message protocol (col. 45 line 10-11 as set forth in claim 72), and wherein the presence information includes information usable by the users subscribed to the target end user for contacting the target end user via an instant message protocol (col. 45 line 10-11 as set forth in claim 76).

One skilled in the art would have recognized the wherein the telephony-related action includes entering DTMF digits using a PSTN telephone handset after a call has been established, the DTMF digits forming a code for instructing an end office to formulate the SS7 message, and would have applied Lamb et al.'s DTMF tones in Chow et al.'s MSC 178. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Lamb et al.'s method and apparatus for providing communications services between connectionless and connection-oriented networks in Chow et al.'s automatic service selection feature for neighborhood residential cordless service with the motivation being to establish public telephone system call connection (col. 9 line 7).

For claim 10, Chow et al. disclose wherein the second message is a copy of the SS7 message (col. 18 lines 9-11).

***Response to Arguments***



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5. Applicant's arguments with respect to claims 1-10, 22-34, 42-50, 61-66, 69-72, 75-76 have been considered but are moot in view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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